ABSTRACT OF THE DISCLOSURE

A system and method are provided for apportioning additional thread activation time to computer application threads that experience activation time budget overruns. A variable is set to a predetermined system pad time value, and an application thread is activated for an actual activation time. The application thread's actual activation time is compared with its activation time budget. If the actual thread activation time exceeds the thread activation time budget, the system pad time value is adjusted to thereby obtain an updated pad time value. By providing a system pad time that application threads may draw from, the pad time allotted to individual application threads may be reduced when compared to a worst-case scenario.